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Substitute for form 1449A/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

*(use as many sheets as necessary)*

Sheet	1	of	1
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**Complete If Known**

Application Number	10,724,113
Filing Date	December 1, 2003
First Named Inventor	Moshe FINAROV et al.
Group Art Unit	<del>2877</del> 2886
Examiner Name	- R. Punnoose
Attorney Docket Number	FINAROV=3A

## U.S. PATENT DOCUMENTS

[illegible]

**FOREIGN PATENT DOCUMENTS**

[illegible]

**Examiner  
Signature**

/Roy Punnoose/

Date Considered

04/01/2007

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 809. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kind Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

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		Examiner Name	- R. Punnoose
Sheet 2	of 2	Attorney Docket Number	FINAROV=3A

**OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T <sup>2</sup>
RP	AH	N. CHATEAU et al, "Algorithm for the rigorous coupled-wave analysis of grating diffraction", <i>Journal of the Optical Society of America A</i> , vol. 11, no. 4, April 1994, pp 1321-1331	
	AI	T. GAYLORD et al, "Analysis and Applications of Optical Diffraction by Gratings", <i>Proceedings of the IEEE</i> , vol. 73, no. 5, May 1985, pp 894-938	
	AJ	E. GLYTSIS et al, "Review of rigorous coupled-wave analysis and of homogeneous effective medium approximations for high spatial-frequency surface-relief gratings", <i>Conference on Binary Optics</i> , February 23-25, 1993, pp 62-76	
	AK	E. GLYTSIS et al, "Rigorous coupled-wave analysis and applications of rating diffraction", <i>Diffraction and Miniaturized Optics, Critical Reviews of Optical Science and Technology</i> , Vol. CR49, 12-13 July 1993, pp 3-31	
	AL	R. KRUKAR et al, "Overlay and grating line shape metrology using optical scatterometry: final report", August 31, 1993, <i>DARPA, U. S. Army Missile Command</i> , p.28	
	AM	R. KRUKAR et al, "Reactive ion etching profile and depth characterization using standard and neutral network analysis of light scattering data", <i>J. Appl. Phys.</i> Vol. 74, No. 6, 15 September 1993	
	AN	S. LEE et al, "More stable algorithm for rigorous coupled wave analysis applied to topography simulation in optical lithography and its numerical implementation", <i>Optical Microlithography IX, SPIE</i> , vol. 2726, 13-15 March 1996, pp 288-298	
	AO	J.M. LENG et al, "Simultaneous measurement of six layers in a silicon on insulator film stack using spectrophotometry and beam profile reflectometry", <i>Journal of Applied Physics</i> , vol. 81, No.8, Apr. 1997, pp 3570-3578	
	AP	D. MILLS et al, "Spectral ellipsometry on patterned wafers", <i>Process, Equipment, and Materials Control in Integrated Circuit Manufacturing, SPIE</i> vol. 2637, 25-26 October 1995, pp 194-203	
	AQ	S. PENG et al, "Efficient implementation of rigorous coupled-wave analysis for surface-relief gratings", <i>J. Opt. Soc. Am. A</i> , vol. 12, no. 5, May 1995, pp 1087-1096	
	AR	D. ZIGER et al, "Linesize effects on ultraviolet reflectance spectra", <i>Optical Engineering</i> , January 1997, vol. 36, no. 1, pp 243-250	
RP	AS	Z. ZYLBERBERG et al, "Rigorous coupled-wave analysis of pure reflection gratings", <i>J. Opt. Soc. Am.</i> , vol. 73, no. 3, March 1983, pp 392-398	

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<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

**Complete if Known**

Application Number	09/610,889
Filing Date	July 6, 2000
First Named Inventor	FINAROV et al.
Group Art Unit	<del>2077</del> 2886
Examiner Name	R. Punnoose
Attorney Docket Number	FINAROV=3

Sheet	1	of	2
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<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

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	AJ	VOSKOVTSOVA et al., <u>Soviet Journal of Optical Technology</u> , (1993) vol.60, no.9, pp.617-619	
	AK	ROGER et al., "Inverse scattering method in electromagnetic optics: Applications to diffraction grating", <u>J. Opt. Soc. Am.</u> , (1980), vol.70, No. 12, pp.1483-1495, Optical Society of America	
	AL	ROGER et al., "The perfectly conducting grating from the point of view of inverse diffraction", <u>Optica Acta</u> , (1979), vol.26, No. 4, pp.447-460, Taylor & Francis Ltd.	
	AM	ROGER et al., "Grating Profile Reconstruction by an Inverse Scattering Method" <u>Optics Communication</u> , (1980), vol.35, No.3, pp.299-302	
	AN	LOCHBIHLER et al., "Reconstruction of the profile of gold wire gratings: A comparison of different methods", <u>Optik</u> , (1994), vol.98, No.1, pp.21-25, Germany	
	AO	SAVITSKII et al., "Efficiency optimization of reflecting diffraction gratings with a trapezoidal groove profile", <u>Opt. Spectrosc.</u> , (1985), vol.59, No.2, pp.251-254, The Optical Society of America	
	AP	SPIKHAL'SKII, "Radiative Bragg Mirrors: Spectral Characteristics Versus Grating Groove Profile", <u>Optics Communication</u> , (1986), vol.57, No. 6, pp.375-379, Holland	
	AQ	NAQVI et al., "Etch depth estimation of large-period silicon grating with multivariate calibration of rigorously simulated diffraction profile", <u>Journal of the Optical Society of America</u> , (1994), vol.11, No.9, pp.2485-2493, Optical Society of America	
	AR	MOHARAM et al., "Rigorous coupled-wave analysis of planar-grating diffraction", <u>Journal of the Optical Society of America</u> , (1981), vol.71, No. 7, pp.811-818, Optical Society of America	
	AS	RAYMOND et al., "Resist and etched line profile characterization using scatterometry", <u>SPIE</u> , (1997), vol.3050, pp.476-486	

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<b>Application Number</b>	<b>09/610,889</b>
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09/610,889

<b>Filing Date</b>	July 6, 2000
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**July 6, 2000**

First Named Inventor	Moshe FINAROV
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**Moshe FINAROV**

Group Art Unit	<del>2877</del>	2886
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~~2877~~ 2886

**Examiner Name**

R. Punnoose

Attorney Docket Number

FINAROV=3

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